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FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. 09/552,713 04/19/2000 3064NG/48834 Koukichi Masumoto 3146 7590 08/12/2003 Crowell & Moring LLP EXAMINER Intellectual Property Group TUGBANG, ANTHONY D P O Box 14300 Washington, DC 20044-4300 ART UNIT PAPER NUMBER 3729

Please find below and/or attached an Office communication concerning this application or proceeding.

		N.K
	Application No.	Applicant(s)
Office Action Summary	09/552,713	MASUMOTO, KOUKICHI
	Examiner	Art Unit
	A. Dexter Tugbang	3729
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status		
1) Responsive to communication(s) filed on 20 May 2003.		
2a) This action is <b>FINAL</b> . 2b) ☐ The	nis action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims		
4)⊠ Claim(s) <u>1-6 and 8-12</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-6 and 8-12</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11)⊠ The proposed drawing correction filed on <u>11 April 2003</u> is: a)⊠ approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inforr	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)
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#### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/11/03 has been entered.

#### Election/Restrictions

2. The restriction requirement in Paper No. 8, dated 12/21/02, is hereby withdrawn. The amendment filed on 4/11/03 (Paper No. 10) has amended the claims such all of the particulars of the subcombination are now required in the combination. Thus, there would be no burdensome search at this time.

### **Drawings**

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 4/11/03 (as part of Paper No. 10) have been approved by the examiner. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

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## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1, 3, 5 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Chandler et al 5,151,034.

Chandler discloses an assembly comprising the following structure: a printed circuit board 40; an electronic component (connector 54) having wire-shaped leg portions (pins 42, 44, 46, 58, 60); a fixing holder (retainer 10) having a hollow shape in a longitudinal direction with top and bottom openings (see Fig. 1); the fixing holder further comprising a holder main body portion 12; a base portion 14, 16 with a side opening configured to form a flat surface on a forward side of the base portion (see Fig. 3); a side surface 18, 20 where the forward side opening is formed including a projection 22, 24, which meets all of the limitations of the claimed assembly.

With respect to the holder having an "almost cylindrical-shaped holder" (line 4 of Claim 1) or a "hollow substantially cylindrical shape" (lines 5-6 of Claim 8), Chandler teaches that the holder is U-shaped (see col. 2, lines 8-10), which can be said to be substantially or almost cylindrical in shape.

Regarding Claim 3, the claimed "slanted surface" is read as the inside surfaces of tabs 22, 24 (in Fig. 3).

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Regarding Claims 9 and 10, Chandler shows that the projection protrudes orthogonally (downward) with respect to the longitudinal (horizontal) direction of the holder (shown in Fig. 2) and further including an engagement tail extending orthogonally (inward) to the projection at a free end (shown in Fig. 3).

It is noted that the limitations directed to the holder being "inclined forward", as recited in Claim 5, have not been given any patentable weight as these limitations appear to be process limitations that do not patentably further limit the claimed structure or final product structure of the fixing holder.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-6 and 8-12, alternatively, are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandler et al in view of Huber et al 3,179,912.

Regarding Claims 1 and 8, if applicant does not believe that Chandler teaches that the holder itself, or the hollow portion of the holder, is almost or substantially cylindrical in shape, then Huber shows a holder 34 that is almost cylindrical in shape including a hollow portion that is substantially cylindrical in shape (in Figs. 2 and 3). The purpose of the cylindrical shape of the holder 34 of Huber is to hold, retain or support a corresponding electrical component that is

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identical, i.e. substantially or almost cylindrical, in shape, to mount the component in a circuit board 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the holder or hollow portion of the holder of Chandler by making the holder substantially or almost cylindrical in shape, as taught by Huber, to positively support, retain and mount an electrical component corresponding in shape.

Regarding Claim 2, Chandler further teaches that the wire-shaped leg portions 46 are passed through the holes formed in the printed circuit board and are dipped in a state of solder (see col. 2, lines 38-41). Chandler does not teach that the projection is inserted into and engaged with an engagement hole formed at the printed circuit board to fix the holder to the printed circuit board.

Huber shows a projection 44 on the holder (in Fig. 2), which includes an extended slanted surface (flange 46) formed at a lower end portion of the flat surface of the holder 34. The projection including a slanted, or curved surface (flange 46), is formed specifically to mate with a hole in the printed circuit board to anchor and rigidly support the holder with the electrical component. The benefits of the above structure of Huber allow the component to not be mounted in any awkward position with respect to the printed circuit board (see col. 3, lines 30-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the projection and circuit board of Chandler by including an additional slanted surface and holes in the circuit board, respectively, as taught by Huber, to

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positively allow the electrically component to be mounted rigidly and anchored and not allow the component to positioned in any awkward manner.

Regarding Claims 11 and 12, Chandler meets these limitations as explained with Claims 9 and 10 above.

Again, it is noted that the limitations directed to the holder being "inclined forward" or "laid down", as recited in each of Claims 2-6, have not been given any patentable weight as these limitations appear to be process limitations that do not patentably further limit the claimed structure or final product structure of the assembly.

## Response to Arguments

8. Applicant's arguments with respect to Claims 1-6 and 8-12 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday Friday 7:00 am 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

A. Dexter Tugbang Primary Examiner

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August 8, 2003